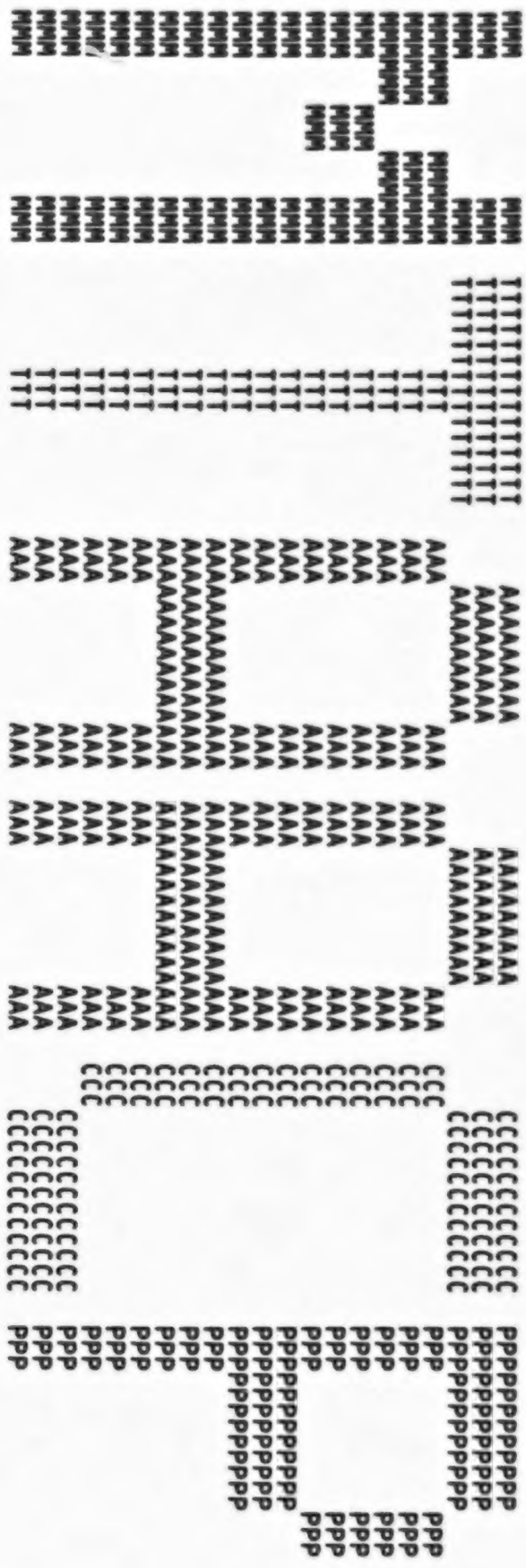

J 6

```
PPPPPPPP      000000      SSSSSSSS  FFFFFFFFFF    IIIIII    DDDDDDDD
PPPPPPPP      000000      SSSSSSSS  FFFFFFFFFF    IIIIII    DDDDDDDD
PP      PP  00      00  SS          FF              II      DD      DD
PP      PP  00      00  SS          FF              II      DD      DD
PP      PP  00      00  SS          FF              II      DD      DD
PP      PP  00      00  SS          FF              II      DD      DD
PPPPPPPP    00      00    SSSSSS    FFFFFFFF        II      DD      DD
PPPPPPPP    00      00    SSSSSS    FFFFFFFF        II      DD      DD
PP          00      00          SS  FF              II      DD      DD
PP          00      00          SS  FF              II      DD      DD
PP          00      00          SS  FF              II      DD      DD      ....
PP          00      00          SS  FF              II      DD      DD      ....
PP            000000    SSSSSSSS    FF          IIIIII    DDDDDDDD        ....
PP            000000    SSSSSSSS    FF          IIIIII    DDDDDDDD        ....

LL            IIIIII      SSSSSSSS
LL            IIIIII      SSSSSSSS
LL              II      SS
LL              II      SS
LL              II      SS
LL              II      SS
LL              II        SSSSSS
LL              II        SSSSSS
LL              II              SS
LL              II              SS
LL              II              SS
LL              II              SS
LLLLLLLLLL    IIIIII    SSSSSSSS
LLLLLLLLLL    IIIIII    SSSSSSSS
```

```
;     1          0001  0 MODULE POSFID ( LANGUAGE ( BLISS32 ) ,
;     2          0002  0                  IDENT = 'V04-000'
;     3          0003  0                  ) =
;     4          0004  1 BEGIN
;     5          0005  1 !
;     6          0006  1 !**********************************************************************
;     7          0007  1 !*                                                                    *
;     8          0008  1 !*  COPYRIGHT (c) 1978, 1980, 1982, 1984 BY                           *
;     9          0009  1 !*  DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS.            *
;    10          0010  1 !*  ALL RIGHTS RESERVED.                                             *
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;    13          0013  1 !*  ONLY IN  ACCORDANCE WITH  THE  TERMS  OF  SUCH  LICENSE  AND WITH THE  *
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;    16          0016  1 !*  OTHER PERSON.  NO TITLE TO AND OWNERSHIP OF  THE  SOFTWARE IS  HEREBY  *
;    17          0017  1 !*  TRANSFERRED.                                                       *
;    18          0018  1 !*                                                                    *
;    19          0019  1 !*  THE INFORMATION IN THIS SOFTWARE IS  SUBJECT TO CHANGE WITHOUT NOTICE  *
;    20          0020  1 !*  AND  SHOULD  NOT  BE  CONSTRUED AS  A COMMITMENT BY DIGITAL EQUIPMENT  *
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;    22          0022  1 !*                                                                    *
;    23          0023  1 !*  DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE  OR  RELIABILITY OF ITS  *
;    24          0024  1 !*  SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.            *
;    25          0025  1 !*                                                                    *
;    26          0026  1 !*                                                                    *
;    27          0027  1 !**********************************************************************
;    28          0028  1
;    29          0029  1 !++
;    30          0030  1 !
;    31          0031  1 ! FACILITY:  MTAACP
;    32          0032  1 !
;    33          0033  1 ! ABSTRACT:
;    34          0034  1 !       This module position the tape
;    35          0035  1 !
;    36          0036  1 ! ENVIRONMENT:
;    37          0037  1 !
;    38          0038  1 !       VMS operating system, including privileged system services
;    39          0039  1 !       and internal exec routines.
;    40          0040  1 !
;    41          0041  1 !--
;    42          0042  1
;    43          0043  1 !
;    44          0044  1 !
;    45          0045  1 ! AUTHOR:  D. H. GILLESPIE,      CREATION DATE:  31-MAY-77  11:30
;    46          0046  1 !
;    47          0047  1 ! MODIFIED BY:
;    48          0048  1 !
;    49          0049  1 !       V03-001 ROW0258         Ralph O. Weber          21-NOV-1983
;    50          0050  1 !                       The Paul Painter Memorial Enhancement
;    51          0051  1 !               Named for one of the unfortunate customers who suffered much
;    52          0052  1 !               to determine the great UCB$L_MT_RECORD secret while trying to
;    53          0053  1 !               create a user-written magtape driver, this change eliminates
;    54          0054  1 !               use of the device dependent field, UCB$L_MT_RECORD in favor of
;    55          0055  1 !               the device independent field, UCB$L_RECORD.
;    56          0056  1 !
;    57          0057  1 !       V02-005 DMW00079        David Michael Walp      2-Mar-1982
```

```
;    58          0058  1 !                 Added check for RVN greater then byte size
;    59          0059  1 !
;    60          0060  1 !       V02-004 REFORMAT        Maria del C. Nasr       30-Jun-1980
;    61          0061  1 !
;    62          0062  1 !
;    63          0063  1 !**
;    64          0064  1
;    65          0065  1 LIBRARY 'SYS$LIBRARY:LIB.L32';
;    66          0066  1
;    67          0067  1 REQUIRE 'SRC$:MTADEF.B32';
```

RDA
V04

00 54 50 00 70 00 20 00 60 00 40 00

```
;    69          0451  1 GLOBAL ROUTINE POSITION_BY_FID ( FID_WANTED, RVN_WANTED ) :
;    70          0452  1                                 COMMON_CALL NOVALUE =
;    71          0453  1
;    72          0454  1 !++
;    73          0455  1 !
;    74          0456  1 ! FUNCTIONAL DESCRIPTION:
;    75          0457  1 !       This routine positions the tape just passed the headers of the file
;    76          0458  1 !       specified by FID
;    77          0459  1 !
;    78          0460  1 ! CALLING SEQUENCE:
;    79          0461  1 !       POSITION_BY_FID ( ARG1, ARG2 )
;    80          0462  1 !
;    81          0463  1 ! INPUT PARAMETERS:
;    82          0464  1 !       ARG1 - file identifier
;    83          0465  1 !       ARG2 - rvn on which file resides
;    84          0466  1 !
;    85          0467  1 ! IMPLICIT INPUTS:
;    86          0468  1 !       CURRENT_VCB - address of current vcb
;    87          0469  1 !       CURRENT_UCB - address of current unit control block
;    88          0470  1 !
;    89          0471  1 ! OUTPUT PARAMETERS:
;    90          0472  1 !       NONE
;    91          0473  1 !
;    92          0474  1 ! IMPLICIT OUTPUTS:
;    93          0475  1 !       NONE
;    94          0476  1 !
;    95          0477  1 ! ROUTINE VALUE:
;    96          0478  1 !       NONE
;    97          0479  1 !
;    98          0480  1 ! SIDE EFFECTS:
;    99          0481  1 !       tape positioned passed HDR1 and HDR2 (if it exists)
;   100          0482  1 !       these labels are read in
;   101          0483  1 !       if file doesn't exist, error exit taken
;   102          0484  1 !
;   103          0485  1 ! USER ERRORS:
;   104          0486  1 !       SS$_NOSUCHFILE - no file exists that matches fid
;   105          0487  1 !--
;   106          0488  1
;   107          0489  2     BEGIN
;   108          0490  2
;   109          0491  2     EXTERNAL REGISTER
;   110          0492  2         COMMON_REG;
;   111          0493  2
;   112          0494  2     EXTERNAL
;   113          0495  2         CURRENT_UCB     : REF BBLOCK,           ! address of current UCB
;   114          0496  2         HDR1            : REF BBLOCK;           ! address of HDR1 (EOF1) label
;   115          0497  2
;   116          0498  2     EXTERNAL ROUTINE
;   117          0499  2         READ_HDR,                               ! read headers
;   118          0500  2         MOUNT_VOL,                              ! mount relative volume
;   119          0501  2         SPACE_EOF;                              ! space to end of file
;   120          0502  2
;   121          0503  2     BIND
;   122          0504  2         CUR_FID = CURRENT_VCB[VCB$W_CUR_NUM];
;   123          0505  2
;   124          0506  2     LOCAL
;   125          0507  2         TM;                                     ! number of tm's past in file
```

```
;  126          0508  2
;  127          0509  2      ! if the file id is zero, then the user has input an invalid file id or
;  128          0510  2      ! the acp has a bug.
;  129          0511  2      !
;  130          0512  2      IF ( .FID_WANTED EQL 0 ) THEN ERR_EXIT ( SS$_BADPARAM );
;  131          0513  2
;  132          0514  3      IF      ( .CUR_FID EQLU .FID_WANTED )
;  133          0515  4         AND ( ( .CURRENT_VCB[VCB$B_TM] EQLU 0 )
;  134          0516  5               OR (      ( .CURRENT_VCB [ VCB$B_TM ] EQLU 1 )
;  135          0517  6                    AND (( .CURRENT_VCB [ VCB$[_ST_RECORD ] -
;  136          0518  5                                .CURRENT_UCB[UCB$L_RECORD] ) EQLU 0 )
;  137          0519  5                    AND ( .HDR1[HD1$L_HD1LID] EQL 'HDR1' )
;  138          0520  4                  )
;  139          0521  3               )
;  140          0522  2      THEN RETURN;
;  141          0523  2
;  142          0524  2      ! check if RVN is less then byte size
;  143          0525  2      !
;  144          0526  2      IF ( .RVN_WANTED GEQU 256 ) THEN ERR_EXIT ( SS$_BADPARAM );
;  145          0527  2
;  146          0528  2      MOUNT_VOL ( IF ( .RVN_WANTED EQL 0 ) THEN 1 ELSE .RVN_WANTED,
;  147          0529  3                $FIELDMASK ( MOU$V_LBLCHECK ) OR $FIELDMASK ( MOU$V_REWIND )
;  148          0530  2                );
;  149          0531  2
;  150          0532  2      READ_HDR();
;  151          0533  2
;  152          0534  2      WHILE TRUE DO
;  153          0535  3          BEGIN
;  154          0536  3          IF ( .CUR_FID EQLU .FID_WANTED ) THEN EXITLOOP;
;  155          0537  3          SPACE_EOF();
;  156          0538  3          IF NOT READ_HDR() THEN ERR_EXIT ( SS$_NOSUCHFILE );
;  157          0539  2          END;
;  158          0540  2
;  159          0541  1      END;                                    ! end of routine

                                                    .TITLE  POSFID
                                                    .IDENT  \V04-000\

                                                    .EXTRN  CURRENT_UCB, HDR1
                                                    .EXTRN  READ_HDR, MOUNT_VOL
                                                    .EXTRN  SPACE_EOF

                                                    .PSECT  $CODE$,NOWRT,2

                                    0000 00000      .ENTRY  POSITION_BY_FID, Save nothing                    ; 0451
                                04  AC   D5 00002      TSTL    FID_WANTED                                   ; 0512
                                    02   12 00005      BNEQ    1$
                                    14   BF 00007      CHMU    #20
                          04    AC    24   AB   D1 00009 1$:   CMPL    36(CURRENT_VCB), FID_WANTED          ; 0514
                                    23   12 0000E      BNEQ    2$
                                    2E   AB   95 00010      TSTB    46(CURRENT_VCB)                          ; 0515
                                    5C   13 00013      BEQL    7$
                                01  2E   AB   91 00015      CMPB    46(CURRENT_VCB), #1                      ; 0516
                                    18   12 00019      BNEQ    2$
                                50  00000G CF   D0 0001B      MOVL    CURRENT_UCB, R0                          ; 0518
                          00B0  C0    30   AB   D1 00020      CMPL    48(CURRENT_VCB), 176(R0)                 ;
```

```
                                     0B  12 00026       BNEQ    2$                                   ;
      31524448    8F        0000G    DF  D1 00028       CMPL    @HDR1, #827475016                    ; 0519
                                     3E  13 00031       BEQL    7$                                   ;
      00000100    8F           08    AC  D1 00033 2$:   CMPL    RVN_WANTED, #256                     ; 0526
                                     02  1F 0003B       BLSSU   3$                                   ;
                                     14  BF 0003D       CHMU    #20                                  ;
                                     03  DD 0003F 3$:   PUSHL   #3                                   ; 0529
                               08    AC  D5 00041       TSTL    RVN_WANTED                           ; 0528
                                     04  12 00044       BNEQ    4$                                   ;
                                     01  DD 00046       PUSHL   #1                                   ;
                                     03  11 00048       BRB     5$                                   ;
                               08    AC  DD 0004A 4$:   PUSHL   RVN_WANTED                           ;
               0000G  CF             02  FB 0004D 5$:   CALLS   #2, MOUNT_VOL                        ;
               0000G  CF             00  FB 00052       CALLS   #0, READ_HDR                         ; 0532
                  04  AC           24    AB  D1 00057 6$:   CMPL    36(CURRENT_VCB), FID_WANTED      ; 0536
                                     13  13 0005C       BEQL    7$                                   ;
               0000G  CF             00  FB 0005E       CALLS   #0, SPACE_EOF                        ; 0537
               0000G  CF             00  FB 00063       CALLS   #0, READ_HDR                         ; 0538
                      EC             50  E8 00068       BLBS    R0, 6$                               ;
                             0910    8F  BF 0006B       CHMU    #2320                                ;
                                     E6  11 0006F       BRB     6$                                   ; 0534
                                         04 00071 7$:   RET                                          ; 0541

; Routine Size:  114 bytes,    Routine Base:  $CODE$ + 0000


;  160          0542  1
;  161          0543  1 END
;  162          0544  1
;  163          0545  0 ELUDOM



;                               PSECT SUMMARY
;
;       Name                  Bytes                       Attributes
;
;  $CODE$                           114  NOVEC,NOWRT, RD , EXE,NOSHR, LCL, REL, CON,NOPIC,ALIGN(2)



;                         Library Statistics
;
;                                             -------- Symbols --------      Pages      Processing
;       File                                  Total    Loaded   Percent      Mapped     Time
;
;  _$255$DUA28:[SYSLIB]LIB.L32;1              18619        12         0      1000        00:01.9
```

```
;                                       COMMAND QUALIFIERS

;       BLISS/CHECK=(FIELD,INITIAL,OPTIMIZE)/LIS=LIS$:POSFID/OBJ=OBJ$:POSFID MSRC$:POSFID/UPDATE=(ENH$:POSFID)

; Size:          114 code + 0 data bytes
; Run Time:        00:06.9
; Elapsed Time:    00:15.1
; Lines/CPU Min:    4759
; Lexemes/CPU-Min: 20288
; Memory Used:  86 pages
; Compilation Complete
```

WTATTR
LIS

POSFID
LIS

RESACC
LIS

RWVOL
LIS

MTHRTL

STRVIO
LIS

MTHRTL
MAP

POSBE
LIS

RDATTR
LIS

REWSPC
LIS

UUMTHRTL
MAP